STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: *10/585,886*

Source:

Date Processed by STIC: *7/20/06*

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE __CHECKER VERSION 4.4.0 PROGRAM__, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

       http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm> , **EFS Submission User Manual** - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05): U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: _10/585,886_

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1 _____ Wrapped Nucleics
Wrapped Aminos

The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2 _____ Invalid Line Length

The rules require that a line not exceed 72 characters in length. This includes white spaces.

3 _____ Misaligned Amino
Numbering

The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

4 _____ Non-ASCII

The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. **Please ensure your subsequent submission is saved in ASCII text.**

5 _____ Variable Length

Sequence(s)_____contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6 _____ PatentIn 2.0
"bug"

A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**

7 _____ Skipped Sequences
(OLD RULES)

Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8 _____ Skipped Sequences
(NEW RULES)

Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

9 _____ Use of n's or Xaa's
(NEW RULES)

Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10 _____ Invalid <213>
Response

Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence

11 _____ Use of <220>

Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32)   (Sec. 1.823 of Sequence Rules)

12 _____ PatentIn 2.0
"bug"

Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13 _____ Misuse of n/Xaa

"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid

AMC – Biotechnology Systems Branch – 09/09/2003

IFWP

RAW SEQUENCE LISTING   DATE: 07/20/2006
PATENT APPLICATION: US/10/585,886   TIME: 08:34:04

Input Set : A:\10861-034US1.txt
Output Set: N:\CRF4\07202006\J585886.raw

```
     4  <110> APPLICANT: Oberdoerffer, Philipp
     5         Kanellopolou, Chrysi
     7  <120> TITLE OF INVENTION: SYSTEMS AND METHODS FOR SHORT RNA EXPRESSION
     9  <130> FILE REFERENCE: 10861-034US1
C-->11  <140> CURRENT APPLICATION NUMBER: US/10/585,886
C-->11  <141> CURRENT FILING DATE: 2006-07-12
    11  <150> PRIOR APPLICATION NUMBER: PCT/US2005/003104
    12  <151> PRIOR FILING DATE: 2005-01-21
    14  <150> PRIOR APPLICATION NUMBER: US 60/538,871
    15  <151> PRIOR FILING DATE: 2004-01-22
    17  <160> NUMBER OF SEQ ID NOS: 22
    19  <170> SOFTWARE: FastSEQ for Windows Version 4.0
    21  <210> SEQ ID NO: 1
    22  <211> LENGTH: 623
    23  <212> TYPE: DNA
    24  <213> ORGANISM: Synthetic U6-STOP-shA1 construct
    26  <400> SEQUENCE: 1
    27  tccgacgccg ccatctctag gcccgcgccg gccccctcgc acagacttgt gggagaagct  60
    28  cggctactcc cctgccccgg ttaatttgca tataatattt cctagtaact atagaggctt  120
    29  aatgtgcgat aaaagacaga taatctgttc tttttaatac tagctacatt ttacatgata  180
    30  ggcttggatt tctataagag atacaaatac taaattatta ttttaaaaaa cagcacaaaa  240
    31  ggaaactcac cctaactgta aagtaattgt gtgttttgag actataactt cgtatagcat  300
    32  acattatacg aagttattac gttttttgcga tttttgaatt cgttcctcag aggaactgac  360
    33  aagcaccccta acatcctatt ggaggctcac tcacgttttt tctattttgt ttcttgacag  420
    34  cagagctcgt tgctcactgt atagctcagg ttggcctgac actgatgagg ttctccagtg  480
    35  actcctcta cctacctact gggatgacag aggtgtacca ccaagccacg cccgggggat  540
    36  ccataacttc gtatagcata cattatacga aggaaatgct ctttctcctc aaagctttga  600
    37  ggagaaagag catttccctt ttt                                          623
    39  <210> SEQ ID NO: 2
    40  <211> LENGTH: 282
    41  <212> TYPE: DNA
    42  <213> ORGANISM: Artificial Sequence
    44  <220> FEATURE:
    46  <223> OTHER INFORMATION: Functional units of the U6-STOP-shA1 construct
    48  <400> SEQUENCE: 2
    49  tccgacgccg ccatctctag gcccgcgccg gccccctcgc acagacttgt gggagaagct  60
    50  cggctactcc cctgccccgg ttaatttgca tataatattt cctagtaact atagaggctt  120
    51  aatgtgcgat aaaagacaga taatctgttc tttttaatac tagctacatt ttacatgata  180
    52  ggcttggatt tctataagag atacaaatac taaattatta ttttaaaaaa cagcacaaaa  240
    53  ggaaactcac cctaactgta aagtaattgt gtgttttgag ac                      282
    55  <210> SEQ ID NO: 3
    56  <211> LENGTH: 5
    57  <212> TYPE: DNA
```

Does Not Comply
Corrected Diskette Needed
(pg. 1)
= Invalid Response
See item #10 on error Summary Sheet.

RAW SEQUENCE LISTING   DATE: 07/20/2006
PATENT APPLICATION: US/10/585,886   TIME: 08:34:04

Input Set : A:\10861-034US1.txt
Output Set: N:\CRF4\07202006\J585886.raw

58 <213> ORGANISM: Artificial Sequence
60 <220> FEATURE:
61 <223> OTHER INFORMATION: U6 promoter of TATA box
63 <400> SEQUENCE: 3
64 tataa   5
66 <210> SEQ ID NO: 4
67 <211> LENGTH: 34
68 <212> TYPE: DNA
69 <213> ORGANISM: Unknown
71 <220> FEATURE:
72 <223> OTHER INFORMATION: Wild type of loxP sequence
74 <400> SEQUENCE: 4
75 ataacttcgt atagcataca ttatacgaag ttat   34
77 <210> SEQ ID NO: 5
78 <211> LENGTH: 225
79 <212> TYPE: DNA
80 <213> ORGANISM: Artificial Sequence
82 <220> FEATURE:
84 <223> OTHER INFORMATION: Stop casete sequence includes U6 pol III
85   termination
87 <400> SEQUENCE: 5
88 tacgtttttg cgattttttga attcgttcct cagaggaact gacaagcacc ctaacatcct 60
89 attggaggct cactcacgtt ttttctatttt tgtttcttga cagcagagct cgttgctcac 120
90 tgtatagctc aggttggcct gacactgatg aggttctcca gtgactgcct ctacctacct 180
91 actgggatga cagaggtgta ccaccaagcc acgcccgggg gatcc   225
93 <210> SEQ ID NO: 6
94 <211> LENGTH: 212
95 <212> TYPE: DNA
96 <213> ORGANISM: Artificial Sequence
98 <220> FEATURE:
100 <223> OTHER INFORMATION: genomic U6 PolIII termination sequence
102 <400> SEQUENCE: 6
103 tttttgaatt cgttcctcag aggaactgac aagcaccctа acatcctatt ggaggctcac 60
104 tcacgtttttt tctattttgt ttcttgacag cagagctcgt tgctcactgt atagctcagg 120
105 ttggcctgac actgatgagg ttctccagtg actgcctcta cctacctact gggatgacag 180
106 aggtgtacca ccaagccacg cccgggggat cc   212
108 <210> SEQ ID NO: 7
109 <211> LENGTH: 34
110 <212> TYPE: DNA
111 <213> ORGANISM: Artificial Sequence
113 <220> FEATURE:
114 <223> OTHER INFORMATION: the mutant second loxP site downstream of the STOP
115   cassette
117 <400> SEQUENCE: 7
118 ataacttcgt atagcataca ttatacgaag gaaa   34
120 <210> SEQ ID NO: 8
121 <211> LENGTH: 22
122 <212> TYPE: DNA
123 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING   DATE: 07/20/2006
PATENT APPLICATION: US/10/585,886   TIME: 08:34:04

Input Set : A:\10861-034US1.txt
Output Set: N:\CRF4\07202006\J585886.raw

```
125 <220> FEATURE:
126 <223> OTHER INFORMATION: Primer
128 <400> SEQUENCE: 8
129 ggacctccat ctgctcttat tt                                   22
131 <210> SEQ ID NO: 9
132 <211> LENGTH: 22
133 <212> TYPE: DNA
134 <213> ORGANISM: Artificial Sequence
136 <220> FEATURE:
137 <223> OTHER INFORMATION: Primer
139 <400> SEQUENCE: 9
140 ggtctattac tgtgcaagtt gg                                   22
142 <210> SEQ ID NO: 10
143 <211> LENGTH: 27
144 <212> TYPE: DNA
145 <213> ORGANISM: Artificial Sequence
147 <220> FEATURE:
148 <223> OTHER INFORMATION: Primer
150 <400> SEQUENCE: 10
151 tgtgaattcg ttcctcagag gaactga                              27
153 <210> SEQ ID NO: 11
154 <211> LENGTH: 36
155 <212> TYPE: DNA
156 <213> ORGANISM: Artificial Sequence
158 <220> FEATURE:
159 <223> OTHER INFORMATION: Primer
161 <400> SEQUENCE: 11
162 tgtggatccc ccgggcgtgg cttggtggta cacctc                    36
164 <210> SEQ ID NO: 12
165 <211> LENGTH: 29
166 <212> TYPE: DNA
167 <213> ORGANISM: Artificial Sequence
169 <220> FEATURE:
170 <223> OTHER INFORMATION: Primer
172 <400> SEQUENCE: 12
173 gactctagat ccgacgccgc catctctag                            29
175 <210> SEQ ID NO: 13
176 <211> LENGTH: 85
177 <212> TYPE: DNA
178 <213> ORGANISM: Artificial Sequence
180 <220> FEATURE:
181 <223> OTHER INFORMATION: Primer
183 <400> SEQUENCE: 13
184 tgcgaattca aaaatcgcaa aaacgtaata acttcgtata agtatgctat acgaagttat 60
185 agtctcaaaa cacacaatta cttac                                85
187 <210> SEQ ID NO: 14
188 <211> LENGTH: 35
189 <212> TYPE: DNA
190 <213> ORGANISM: Artificial Sequence
```

RAW SEQUENCE LISTING   DATE: 07/20/2006
PATENT APPLICATION: US/10/585,886   TIME: 08:34:04

Input Set : A:\10861-034US1.txt
Output Set: N:\CRF4\07202006\J585886.raw

```
192 <220> FEATURE:
193 <223> OTHER INFORMATION: Primer
195 <400> SEQUENCE: 14
196 tgctcgagat gtctgagtac gagttcatgc atatc                    35
198 <210> SEQ ID NO: 15
199 <211> LENGTH: 41
200 <212> TYPE: DNA
201 <213> ORGANISM: Artificial Sequence
203 <220> FEATURE:
204 <223> OTHER INFORMATION: Primer
206 <400> SEQUENCE: 15
207 ctggatcctt atttcagcag gaacagcatc tcccatatct g             41
209 <210> SEQ ID NO: 16
210 <211> LENGTH: 32
211 <212> TYPE: DNA
212 <213> ORGANISM: Artificial Sequence
214 <220> FEATURE:
215 <223> OTHER INFORMATION: Primer
217 <400> SEQUENCE: 16
218 ctggatcctt acttgaggag aaagagcatt tc                       32
220 <210> SEQ ID NO: 17
221 <211> LENGTH: 21
222 <212> TYPE: DNA
223 <213> ORGANISM: Artificial Sequence
225 <220> FEATURE:
226 <223> OTHER INFORMATION: Primer
228 <400> SEQUENCE: 17
229 ttcctaataa cccagccttt g                                   21
231 <210> SEQ ID NO: 18
232 <211> LENGTH: 21
233 <212> TYPE: DNA
234 <213> ORGANISM: Artificial Sequence
236 <220> FEATURE:
237 <223> OTHER INFORMATION: Primer
239 <400> SEQUENCE: 18
240 gtgatggcag gagatttgta a                                   21
242 <210> SEQ ID NO: 19
243 <211> LENGTH: 24
244 <212> TYPE: DNA
245 <213> ORGANISM: Artificial Sequence
247 <220> FEATURE:
248 <223> OTHER INFORMATION: Primer
250 <400> SEQUENCE: 19
251 cattaactgg ggaaggattg tgac                                24
253 <210> SEQ ID NO: 20
254 <211> LENGTH: 24
255 <212> TYPE: DNA
256 <213> ORGANISM: Artificial Sequence
258 <220> FEATURE:
```

RAW SEQUENCE LISTING   DATE: 07/20/2006
PATENT APPLICATION: US/10/585,886   TIME: 08:34:04

Input Set : **A:\10861-034US1.txt**
Output Set: **N:\CRF4\07202006\J585886.raw**

```
259 <223> OTHER INFORMATION: Primer
261 <400> SEQUENCE: 20
262 gcagaaaagt cagccagcca gatt                                    24
264 <210> SEQ ID NO: 21
265 <211> LENGTH: 20
266 <212> TYPE: DNA
267 <213> ORGANISM: Artificial Sequence
269 <220> FEATURE:
270 <223> OTHER INFORMATION: Primer
272 <400> SEQUENCE: 21
273 caagagggag agcaagccta                                        20
275 <210> SEQ ID NO: 22
276 <211> LENGTH: 20
277 <212> TYPE: DNA
278 <213> ORGANISM: Artificial Sequence
280 <220> FEATURE:
281 <223> OTHER INFORMATION: Primer
283 <400> SEQUENCE: 22
284 cgtctcaggc cttcagtgag          20
```

VERIFICATION SUMMARY   DATE: 07/20/2006
PATENT APPLICATION: US/10/585,886   TIME: 08:34:05

Input Set : **A:\10861-034US1.txt**
Output Set: **N:\CRF4\07202006\J585886.raw**

L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date